ABSTRACT

The present invention relates to a method for determining the orientation of text, so that the text can be correctly read. In one embodiment, the method analyzes the "open" portions of text characters to determine in which direction the open portions face. By determining the respective densities of characters opening in each direction (e.g., right or left), the method can establish in which direction the text as a whole is orientated. The present invention may be adapted for use in automated mail processing, to determine the orientation of checks in automated teller machine envelopes, or the orientation of scanned or copied documents, or documents sent via facsimile, or to determine the orientation of digital photographs that include text (e.g., road signs, business cards, driver's licenses, etc.), among other applications. A fast, substantially automatic determination of text orientation according to the present invention will reduce the labor expense and processing delay required for manual orientation.